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UNIVERSITY
WASHINGTON, DC

SCIENCE AND
ENGINEERING
COMPLEX
(SEC)

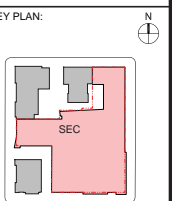
Square 55 - Washington DC 20052

Architecture
Engineering
Planning
Interior Design

Ballinger

833 Chestnut Street
Suite 1400
Philadelphia, PA 19107
V 215.446.0900
F 215.446.0901
ballinger.com

Hickok Cole



DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

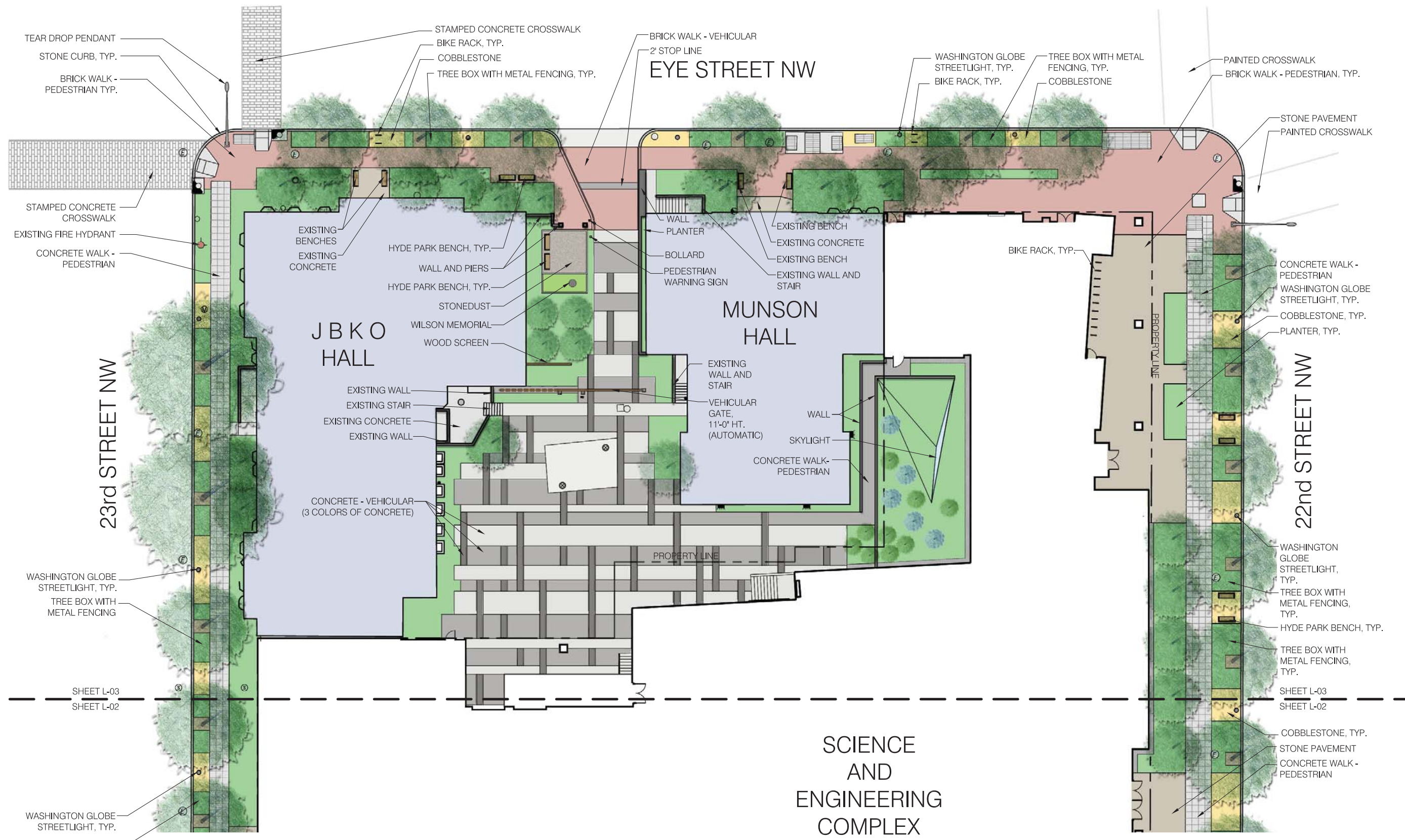
TITLE:
**ILLUSTRATIVE
SITE PLAN**

NUMBER:
L-01

NOTES:
• Streetscape details are shown in concept for illustrative purposes. The final details of the streetscape improvements will conform with the approved Foggy Bottom Campus Streetscape Guidelines as well as other applicable design and permitting standards.

• See architectural plans for building interior.

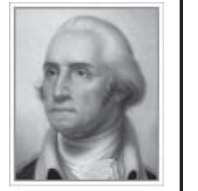
SCALE: 1" = 50'



SCIENCE AND ENGINEERING COMPLEX

NOTES:
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• See architectural plans for building interior. SCALE: 1" = 30'



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 Square 55 - Washington DC 20052

Architecture:
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 Interior Design

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Hickok Cole



KEY PLAN:

 N

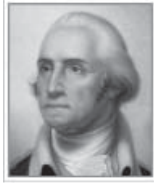
DATE:
 MARCH 4, 2011

SECOND-STAGE
 PUD APPLICATION

TITLE:
 ANNOTATED
 SITE PLAN -
 NORTH

NUMBER:
L-03

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Engineering
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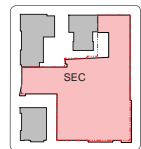
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KEY PLAN:



DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:

PLANTING
PLAN -
SOUTH

NUMBER:

L-04



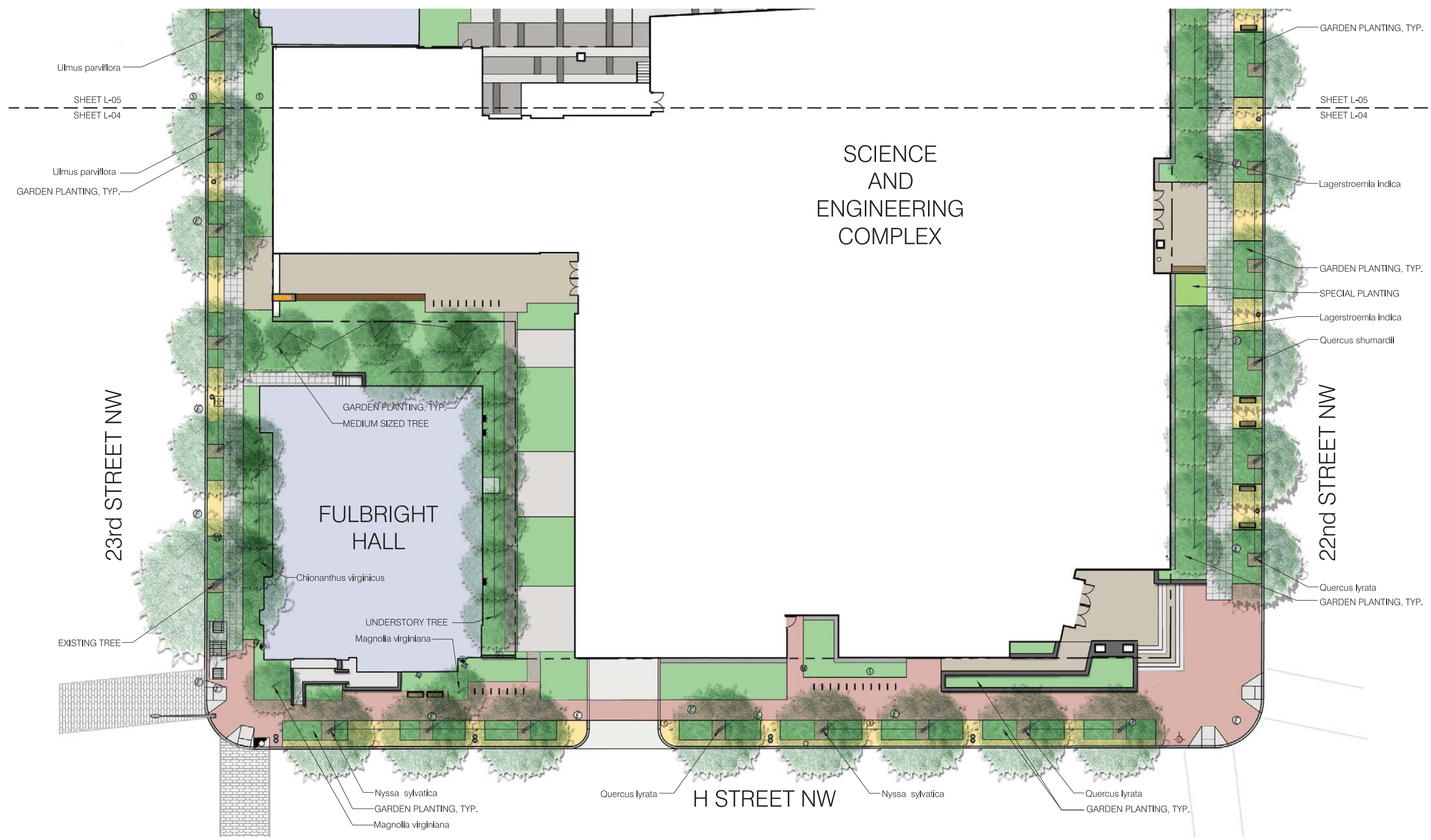
SCALE: 1" = 30'

NOTES:

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- Plant species selections identified on this plan are shown to illustrate design intent only. The purpose is to generally define plant size, character, and locations. Refinements to the planting design and final selection of all plant materials consistent with the species shown shall be developed during detailed design phases of work.

- See architectural plans for building interior.





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Architecture
Engineering
Planning
Interior Design

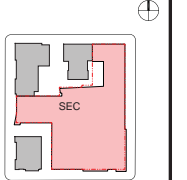
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KEY PLAN:



DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:

PLANTING
PLAN -
NORTH

NUMBER:

L-05



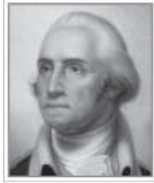
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AND
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COMPLEX

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- See architectural plans for building interior.

SCALE: 1" = 30'

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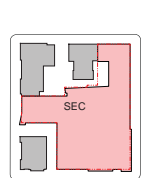
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KEY PLAN:



DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:

SITE
FURNISHINGS

NUMBER:

L-06



BENCH



BIKE RACK



WASHINGTON GLOBE STREETLIGHT



TWIN 20 STREETLIGHT



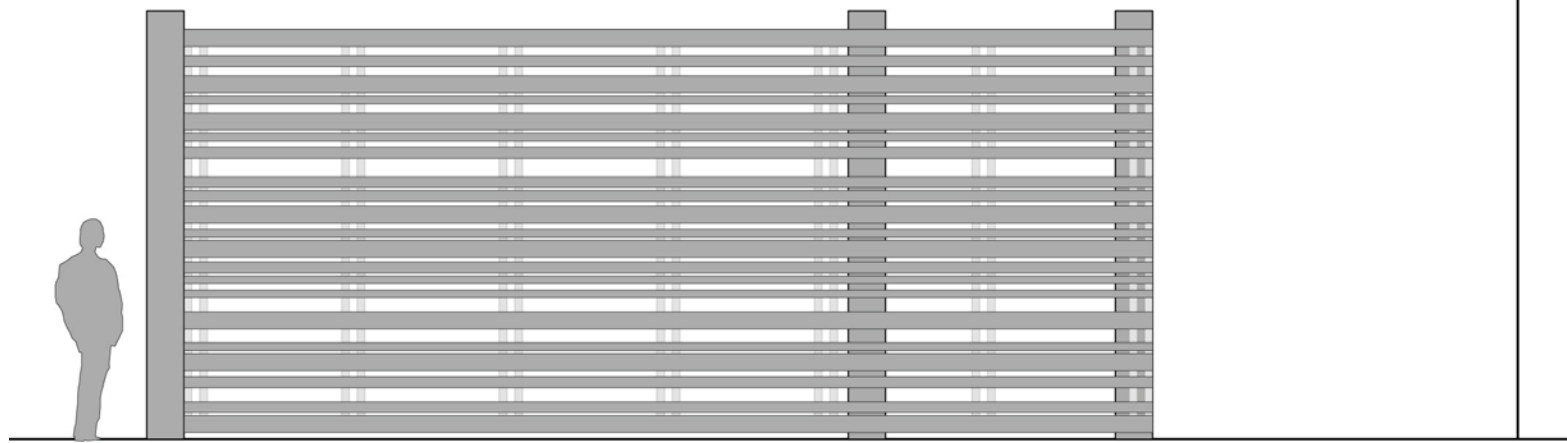
TEAR DROP PENDANT STREETLIGHT



TREE BOX FENCING

NOTE:

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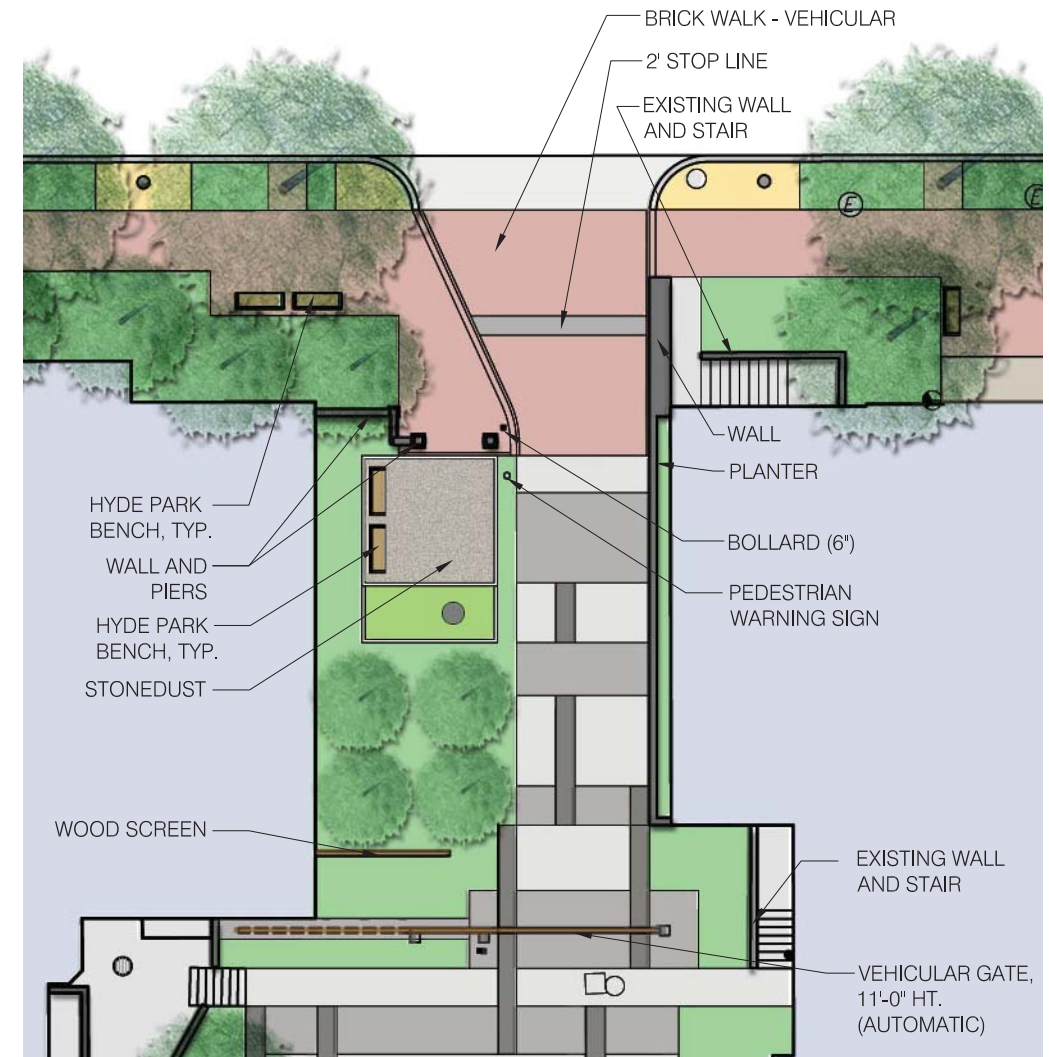
GATE ELEVATION

NOT TO SCALE

NOTES:

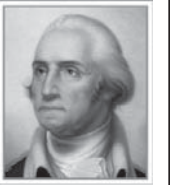
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PLAN

SCALE: 1"=20'



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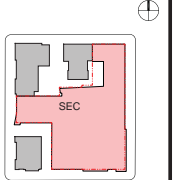
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KEY PLAN:

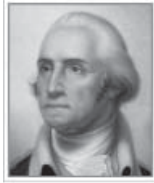


DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:
**EYE STREET
POCKET PARK**

NUMBER:
L-07



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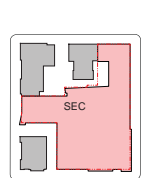
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KEY PLAN:



DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:

PLANTING

NUMBER:

L-08



Quercus lyrata
(Overcup Oak)



Quercus shumardii
(Shumard Oak)



Ulmus parviflora
(Chinese Elm)



Nyssa sylvatica
(Blackgum)



Amelanchier canadensis
(Canadian Serviceberry)



Amelanchier x grandiflora
(Apple Serviceberry)



Lagerstroemia indica
(Crape Myrtle)



Magnolia virginiana
(Sweetbay Magnolia)



Chionanthus virginicus
(Fringe Tree)



Garden Planting

Potential Plants for Garden Planting Areas	
Botanical Name	Common Name
<i>Hosta</i>	Plantain Lily
<i>Ilex glabra</i>	Inkberry Holly
<i>Liriope muscari</i>	Liriope
<i>Nandina domestica</i>	Heavenly Bamboo
<i>Pennisetum alopecuroides</i>	Fountain Grass
<i>Osmunda cinnamomea</i>	Cinnamon fern
<i>Panicum virgatum</i>	Switchgrass
<i>Prunus laurocerasus</i>	Cherry Laurel
<i>Rosa 'Knockout'</i>	Knockout Rose

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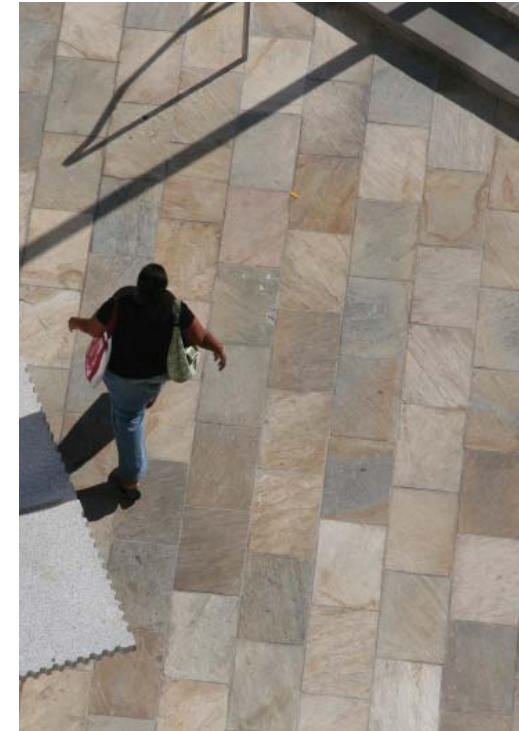
COBBLESTONE
 (Located on 22nd Street, 23rd Street, H Street and Eye Street)



CONCRETE WALK
 (Located on 22nd Street and 23rd Street)



BRICK WALK
 (Located on H Street and Eye Street)



STONE PAVEMENT
 (Located at building entrances)



COLORED CONCRETE
 (Located in service courtyard)



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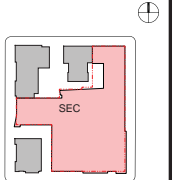
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DATE:
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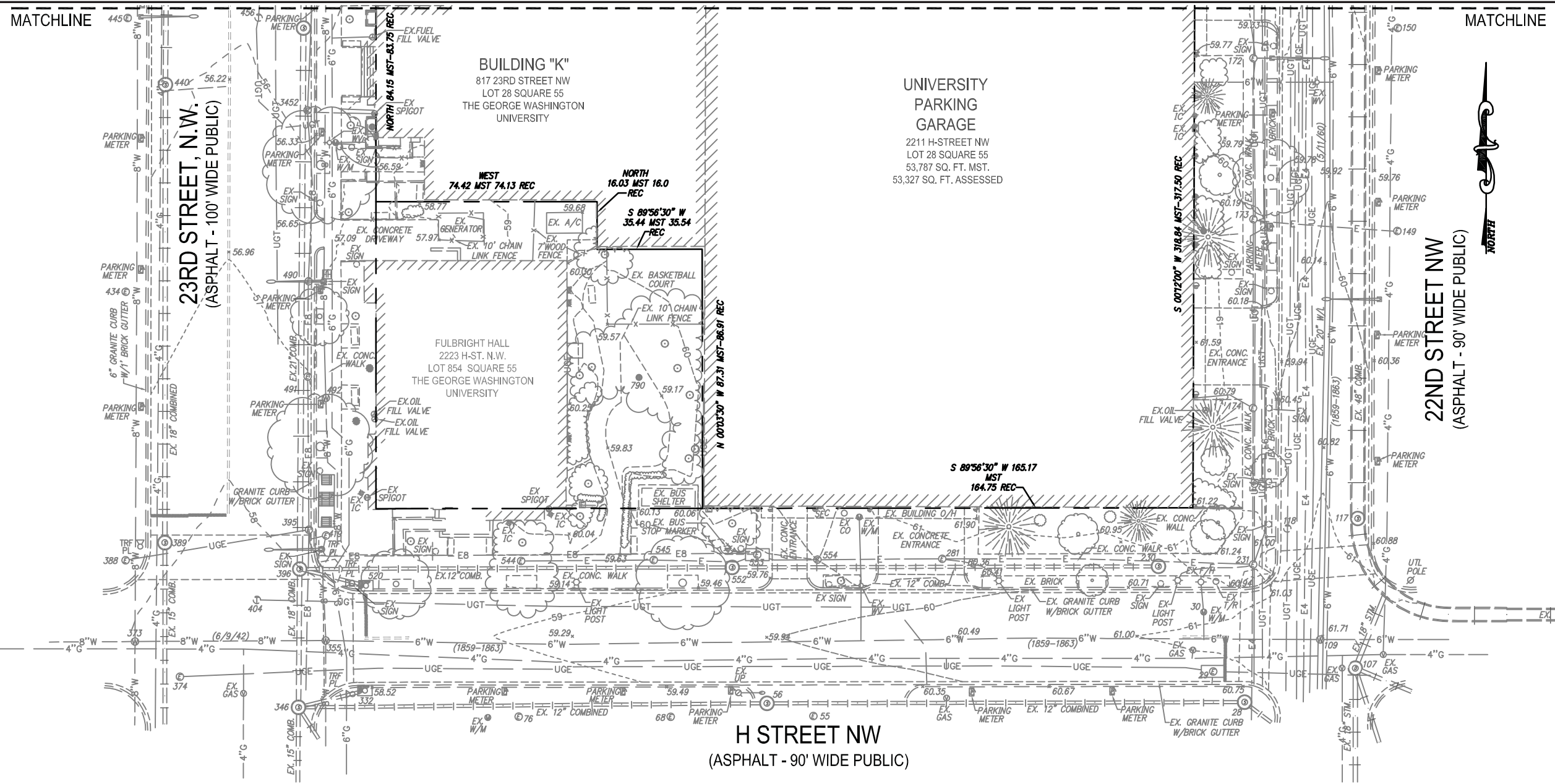
**SECOND-STAGE
 PUD APPLICATION**

TITLE:

MATERIALS

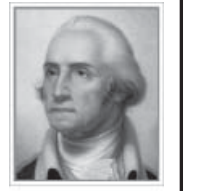
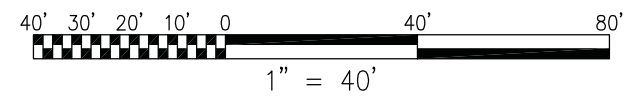
NUMBER:

L-09



STORM/ COMBINED SEWER TABULATION

SANITARY MANHOLE 28 TOP = 61.35 INVERT IN = 56.77 (SW) INVERT IN = 51.14 (E) INVERT OUT = 51.05 (W)	ELECTRIC MANHOLE 76 TOP = 59.16 BOTTOM = 56.62	ELECTRIC MANHOLE 166 TOP = 58.97 BOTTOM = 56.97	ELECTRIC MANHOLE 281 TOP = 60.33 BOTTOM = 57.98	ELECTRIC MANHOLE 553 TOP = 59.92 BOTTOM = 50.98 (VAULT)	DRAINAGE MANHOLE 918 TOP = 57.80 BOTTOM = 51.46 FULL OF DEBRIS	ELECTRIC MANHOLE 1075 TOP = 57.05 BOTTOM = 51.26 (VAULT)	SANITARY MANHOLE 1137 TOP = 57.21 INVERT IN = 50.06 (SE) INVERT IN = 46.46 (E) INVERT OUT = 46.31 (NW)
ELECTRIC MANHOLE 29 TOP = 60.78 BOTTOM = 55.32	SANITARY MANHOLE 107 TOP = 61.63 INVERT IN = 57.11 (E) INVERT IN = 56.11 (S) INVERT IN = 49.43 (S) INVERT OUT = 49.23 (N)	ELECTRIC MANHOLE 171 TOP = 58.88 BOTTOM = 56.79	SANITARY MANHOLE 440 TOP = 55.87 INACCESSIBLE	ELECTRIC MANHOLE 554 TOP = 60.00 BOTTOM = 57.31	ELECTRIC MANHOLE 919 TOP = 57.61 BOTTOM = 50.04	TELEPHONE MANHOLE 1078 TOP = 57.50 BOTTOM = 40.58	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
WATER MANHOLE 30 TOP = 60.85 BOTTOM = 57.72	WATER MANHOLE 109 TOP = 61.68 BOTTOM = 59.48	ELECTRIC MANHOLE 172 TOP = 59.55 BOTTOM = 56.87	TELEPHONE MANHOLE 456 TOP = 55.85 INACCESSIBLE	STORM GRATE 790 TOP = 59.07 BOTTOM = 53.66 FULL OF WATER	WATER MANHOLE 1023 TOP = 57.82 BOTTOM = 53.57	WATER MANHOLE 1082 TOP = 57.59 BOTTOM = 53.44	SANITARY MANHOLE 1138 TOP = 57.33 INVERT IN = 48.71 (SE) INVERT OUT = 48.31 (NW)
ELECTRIC MANHOLE 55 TOP = 60.14 BOTTOM = 57.86	SANITARY MANHOLE 117 TOP = 60.70 INVERT = 48.31 (S) INVERT = 48.29 (N)	ELECTRIC MANHOLE 173 TOP = 56.55 BOTTOM = 57.56	ELECTRIC MANHOLE 490 TOP = 56.55 BOTTOM = 53.16	ELECTRIC MANHOLE 905 TOP = 58.49 BOTTOM = 56.38	ELECTRIC MANHOLE 1024 TOP = 57.85 BOTTOM = 51.10	WATER MANHOLE 1083 TOP = 57.58 BOTTOM = 53.58	UTILITY MANHOLE 1164 TOP = 56.27 INACCESSIBLE
SANITARY MANHOLE 56 TOP = 59.93 INVERT IN = 56.31 (SW) INVERT IN = 50.03 (E) INVERT OUT = 49.92 (W)	TELEPHONE MANHOLE 118 TOP = 60.62 BOTTOM = 53.57	ELECTRIC MANHOLE 174 TOP = 60.67 BOTTOM = 58.22	ELECTRIC MANHOLE 544 TOP = 59.36 BOTTOM = 56.59	SANITARY MANHOLE 907 TOP = 57.77 INVERT IN = 52.49 (NW) INVERT IN = 53.44 (NE) INVERT IN = 46.48 (S) INVERT OUT = 46.38 (N)	DRAINAGE MANHOLE 1031 TOP = 57.90 BOTTOM = 52.08 FULL OF WATER	WATER MANHOLE 1084 TOP = 57.56 BOTTOM = 53.06	UTILITY MANHOLE 1170 TOP = 58.23 INACCESSIBLE
ELECTRIC MANHOLE 68 TOP = 59.72 BOTTOM = 57.30	ELECTRIC MANHOLE 150 TOP = 59.51 BOTTOM = 57.19	SANITARY MANHOLE 230 TOP = 60.88 INVERT OUT = 50.77 (W)	ELECTRIC MANHOLE 545 TOP = 59.76 BOTTOM = 57.00	TELEPHONE MANHOLE 913 TOP = 57.66 BOTTOM = 50.94	DRAINAGE MANHOLE 1032 TOP = 57.89 BOTTOM = 51.08 FULL OF WATER	DRAINAGE MANHOLE 1115 TOP = 57.77 INVERT OUT = 54.16 BOTTOM = 51.55 FULL OF WATER	ELECTRIC MANHOLE 1200 TOP = 56.45 BOTTOM = 48.10 (VAULT)
		ELECTRIC MANHOLE 231 TOP = 61.14 BOTTOM = 58.12	ELECTRIC MANHOLE 552 TOP = 59.76 INVERT IN = 50.65 (E) INVERT IN = 49.47 (E) INVERT OUT = 49.42 (W)	ELECTRIC MANHOLE 917 TOP = 57.46 BOTTOM = 49.46	ELECTRIC MANHOLE 1068 TOP = 57.63 BOTTOM = 52.06	SANITARY MANHOLE 1136 TOP = 57.05 INVERT = 43.86 (W)	ELECTRIC MANHOLE 1427 TOP = 58.28 8" INVERT IN = 55.59 BOTTOM = 51.22 FULL OF WATER
						ELECTRIC MANHOLE 3452 TOP = 55.92 BOTTOM = 51.72	



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WASHINGTON DC

SCIENCE AND ENGINEERING COMPLEX (SEC)
Square 55 - Washington DC 20052

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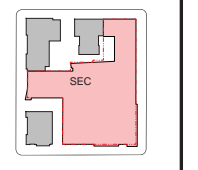
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Hickok Cole



KEY PLAN:
N

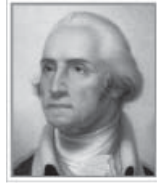


DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:
EXISTING
CONDITIONS
PLAN - SOUTH

NUMBER:
C-01



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SCIENCE AND ENGINEERING COMPLEX (SEC)

Square 55 - Washington DC 20052

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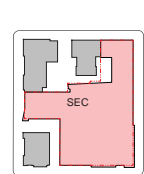
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Hickok Cole



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DATE:
MARCH 4, 2011

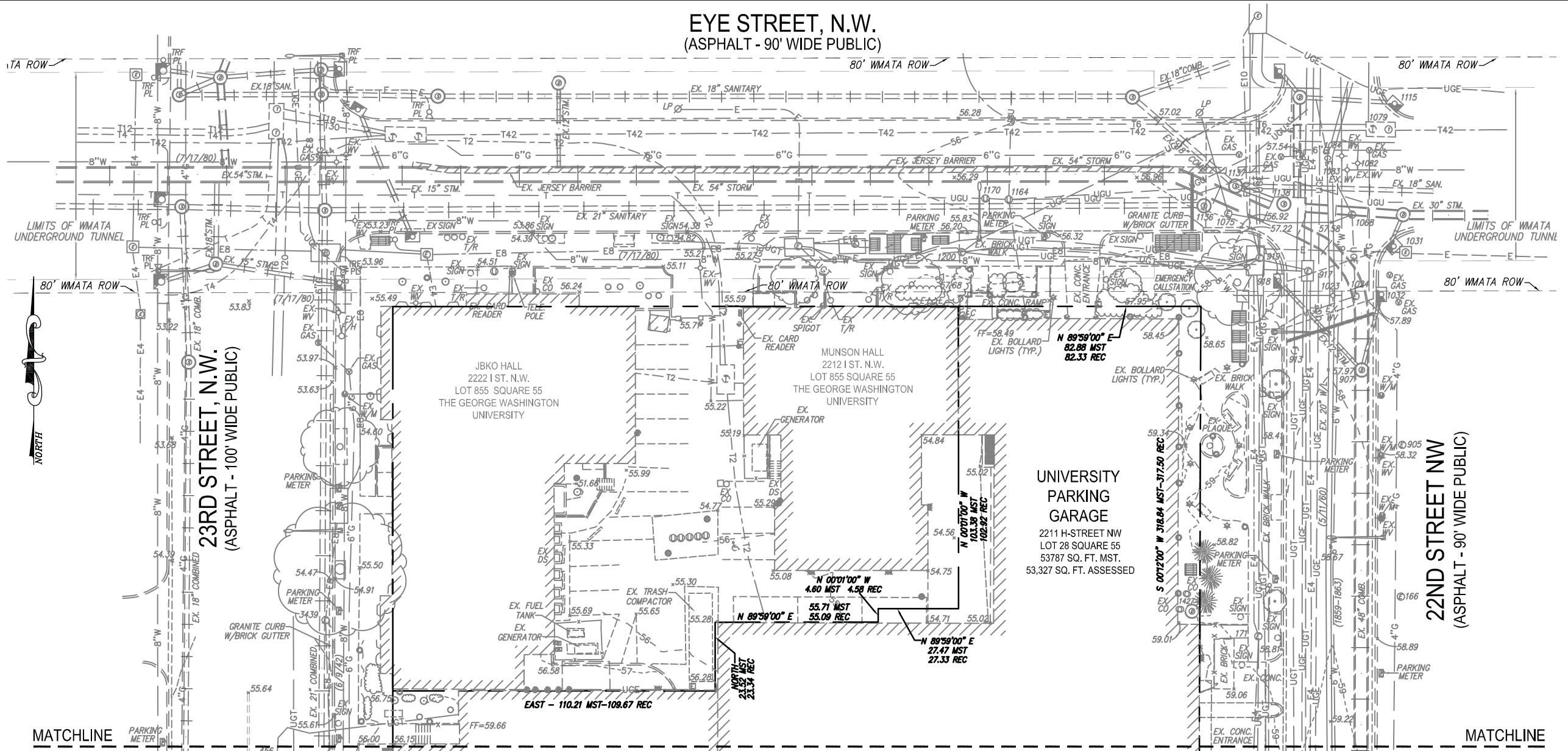
SECOND-STAGE
PUD APPLICATION

TITLE:
EXISTING
CONDITIONS
PLAN - NORTH

NUMBER:

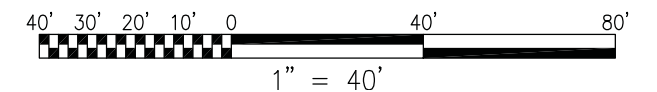
C-02

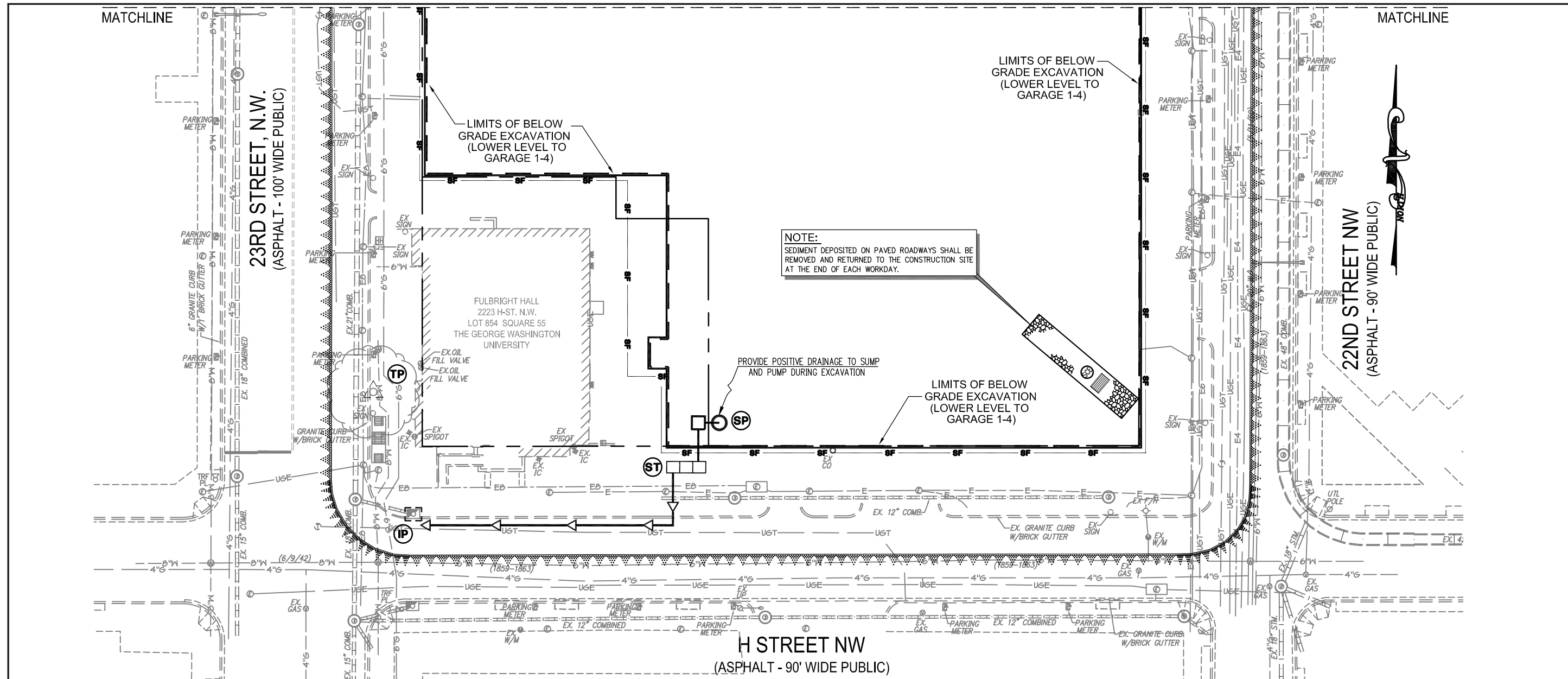
EYE STREET, N.W. (ASPHALT - 90' WIDE PUBLIC)



STORM/ COMBINED SEWER TABULATION

SANITARY MANHOLE 28 TOP = 61.35 INVERT IN = 56.77 (SW) INVERT IN = 51.14 (E) INVERT OUT = 51.05 (W)	ELECTRIC MANHOLE 76 TOP = 59.16 BOTTOM = 56.62	ELECTRIC MANHOLE 166 TOP = 58.97 BOTTOM = 56.97	ELECTRIC MANHOLE 281 TOP = 60.33 BOTTOM = 57.98	ELECTRIC MANHOLE 553 TOP = 59.92 BOTTOM = 50.98 (VAULT)	DRAINAGE MANHOLE 918 TOP = 57.80 BOTTOM = 51.46 FULL OF DEBRIS	ELECTRIC MANHOLE 1075 TOP = 57.05 BOTTOM = 51.26 (VAULT)	SANITARY MANHOLE 1137 TOP = 57.21 INVERT IN = 50.06 (SE) INVERT IN = 46.46 (E) INVERT OUT = 46.31 (NW)
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ELECTRIC MANHOLE 55 TOP = 60.14 BOTTOM = 57.86	SANITARY MANHOLE 117 TOP = 60.70 INVERT = 48.31 (S) INVERT = 48.29 (N)	ELECTRIC MANHOLE 173 TOP = 60.06 BOTTOM = 57.56	ELECTRIC MANHOLE 490 TOP = 56.55 BOTTOM = 53.16	ELECTRIC MANHOLE 905 TOP = 58.49 BOTTOM = 56.38	ELECTRIC MANHOLE 1024 TOP = 57.65 BOTTOM = 51.10	WATER MANHOLE 1083 TOP = 57.59 BOTTOM = 53.58	UTILITY MANHOLE 1164 TOP = 56.27 INACCESSIBLE
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ELECTRIC MANHOLE 68 TOP = 59.72 BOTTOM = 57.30	ELECTRIC MANHOLE 150 TOP = 59.51 BOTTOM = 57.19	SANITARY MANHOLE 230 TOP = 60.88 INVERT OUT = 50.77 (W)	ELECTRIC MANHOLE 545 TOP = 59.76 BOTTOM = 57.00	ELECTRIC MANHOLE 913 TOP = 57.66 BOTTOM = 50.94	DRAINAGE MANHOLE 1032 TOP = 57.89 BOTTOM = 51.08 FULL OF WATER	WATER MANHOLE 1084 TOP = 57.56 BOTTOM = 53.06	ELECTRIC MANHOLE 1200 TOP = 56.45 BOTTOM = 48.10 (VAULT)
		ELECTRIC MANHOLE 231 TOP = 61.14 BOTTOM = 58.12	SANITARY MANHOLE 552 TOP = 59.76 INVERT IN = 50.65 (E) INVERT IN = 49.47 (E) INVERT OUT = 49.42 (W)	TELEPHONE MANHOLE 917 TOP = 57.46 BOTTOM = 49.46	ELECTRIC MANHOLE 1068 TOP = 57.63 BOTTOM = 52.06	SANITARY MANHOLE 1136 TOP = 57.05 INVERT = 43.86 (W)	SANITARY MANHOLE 1427 TOP = 59.26 8" INVERT IN = 55.59 BOTTOM = 51.22 FULL OF WATER
							ELECTRIC MANHOLE 3452 TOP = 55.92 BOTTOM = 51.72





DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
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 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE;
 - B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER;
 - C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES;
 - B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
 - C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

CONSTRUCTION AND STABILIZATION SEQUENCE:

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING STABILIZED TREE PROTECTION, AND SILT FENCE AS INDICATED ON SHEET C-03. SEE SHEET C-10 FOR SEDIMENTATION AND EROSION CONTROL DETAILS.
2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.

3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN.
4. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR THE PROPOSED BUILDING.
5. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

SEDIMENTATION EROSION CONTROL NOTE:

THE APPLICANT MUST NOTIFY THE DEPARTMENT OF HEALTH BY PHONE (202-535-2240) AT LEAST 24 HOURS PRIOR TO THE START OF GRADING ACTIVITY AND WITHIN (2) WEEKS AFTER COMPLETION OF PROJECT TO REQUEST INSPECTION. IF THERE IS NEED TO MAKE CHANGES OR MODIFICATIONS IN THE APPROVED DESIGN, DEPARTMENT OF HEALTH MUST BE NOTIFIED IMMEDIATELY.

SCHEDULE AND HOLD PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY. CALL 202-535-2977 FOR APPOINTMENT.

NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.
2. PROVIDE SILT FENCE AT PERIMETER OF EXCAVATION AREA TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN UNLESS OTHERWISE APPROVED BY THE INSPECTOR.
3. CONTRACTOR TO PROVIDE ON SITE APPROVED STAMPED AND SIGNED SEDIMENTATION AND EROSION CONTROL DRAWINGS BY DEPARTMENT OF HEALTH, WATERSHED PROTECTION DIVISION.

TOTAL VOLUME OF CUT/EXCAVATION:

LEVEL	AREA OF EXCAVATION	ELEVATION	DEPTH
LEVEL 1	8,596.93 SF	42.25 FT.	17.00 FT.
LEVEL 2	8,596.93 SF	26.25 FT.	16.00 FT.

VOLUME OF CUT: 8,596.93 SF (AREA) x 33.00' (DEPTH)

27

VOLUME OF CUT: 10,507.36 CY ±

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LEVEL 1	45,904.97 SF	42.25 FT.	17.00 FT.
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G1	45,904.97 SF	16.25 FT.	10.00 FT.
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G3	45,904.97 SF	- 2.75 FT.	9.5 FT.
G4	45,904.97 SF	- 12.25 FT.	9.5 FT.

VOLUME OF CUT: 45,904.97 SF (AREA) x 72.00' (DEPTH)

27

VOLUME OF CUT: 122,413.25 CY ±

TOTAL VOLUME OF CUT/EXCAVATION: 132,920.61 CY±

TOTAL VOLUME OF FILL: 0.00 CY±

CONSTRUCTION DATES:

* EXACT DATE OF CONSTRUCTION TO BE DETERMINED BY THE OWNER.

TOTAL AREA OF DISTURBANCE:

TOTAL AREA OF DISTURBANCE: 54,524 SQUARE FEET OR 1.2516 AC

SEDIMENT CONTROL APPROVAL:

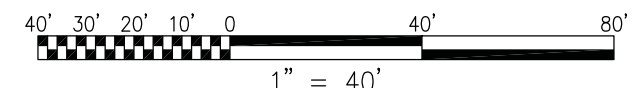
PLAN NUMBER: _____
 THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITTEE/ CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON. HE SHALL NOTIFY THIS OFFICE AT NUMBER LISTED BELOW AT LEAST 24 HOURS BEFORE START OF GRADING ACTIVITY, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

DATE _____ EROSION AND SEDIMENT CONTROL BRANCH

FOR FURTHER INFORMATION, PLEASE CALL:
 GOVERNMENT OF THE DISTRICT OF COLUMBIA
 DISTRICT DEPARTMENT OF ENVIRONMENT
 WATERSHED PROTECTION DIVISION

1200 1ST-STREET, NE
 WASHINGTON, D.C.
 TEL NO. (202) 535-2240
 FAX NO. (202) 535-1364

THIS SHEET IS TO BE USED FOR SEDIMENTATION AND EROSION CONTROL PURPOSES ONLY !!



LEGEND

PROPOSED

- TEMP CONSTRUCTION ENTRANCE: [Symbol]
- WASH RACK: [Symbol]
- SILT FENCE: [Symbol]
- INLET PROTECTION: [Symbol]
- APPROXIMATE LIMIT OF BELOW GRADE EXCAVATION: [Symbol]
- APPROXIMATE LIMIT OF DISTURBANCE: [Symbol]
- SEDIMENT TANK: [Symbol]
- SUMP PUMP: [Symbol]
- TREE PROTECTION: [Symbol]

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Hickok Cole

ARCHITECTS

KEY PLAN:

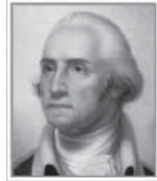
DATE: MARCH 4, 2011

SECOND-STAGE PUD APPLICATION

TITLE: SEDIMENTATION AND EROSION CONTROL PLAN - SOUTH

NUMBER: C-03

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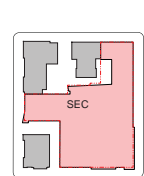
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F 215.446.0901
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KEY PLAN:



DATE:

MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

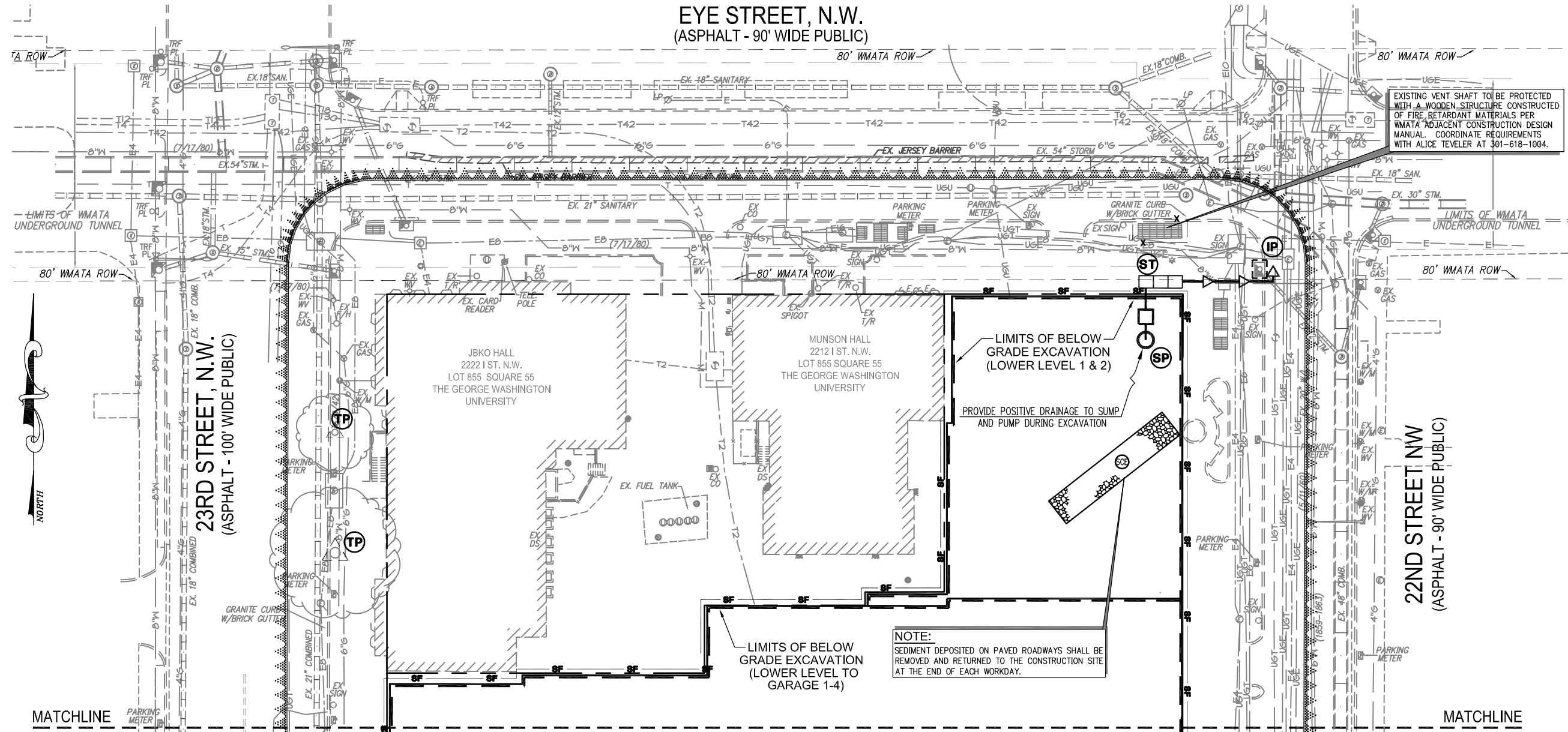
TITLE:

SEDIMENTATION AND
EROSION CONTROL
PLAN - NORTH

NUMBER:

C-04

EYE STREET, N.W. (ASPHALT - 90' WIDE PUBLIC)



EXISTING VENT SHAFT TO BE PROTECTED WITH A WOODEN STRUCTURE CONSTRUCTED OF FIRE RETARDANT MATERIALS PER WMATA ADJACENT CONSTRUCTION DESIGN MANUAL. COORDINATE REQUIREMENTS WITH ALICE TEVELER AT 301-618-1004.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
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SEDIMENT CONTROL APPROVAL:

PLAN NUMBER:
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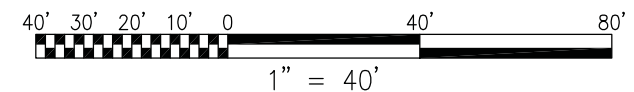
DATE

EROSION AND SEDIMENT CONTROL BRANCH

FOR FURTHER INFORMATION, PLEASE CALL:
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DISTRICT DEPARTMENT OF ENVIRONMENT
WATERSHED PROTECTION DIVISION

1200 1ST-STREET, NE
WASHINGTON, D.C.
TEL NO. (202) 535-2240
FAX NO. (202) 535-1364

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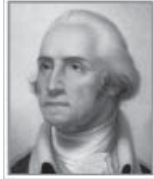


LEGEND

PROPOSED

- TEMP CONSTRUCTION ENTRANCE: SCE
- WASH RACK
- SILT FENCE: SF
- INLET PROTECTION: IP
- APPROXIMATE LIMIT OF BELOW GRADE EXCAVATION
- APPROXIMATE LIMIT OF DISTURBANCE
- SEDIMENT TANK: ST
- SUMP PUMP: SP
- TREE PROTECTION: TP

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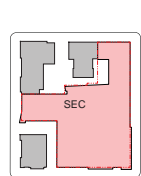
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KEY PLAN:



DATE:
MARCH 4, 2011

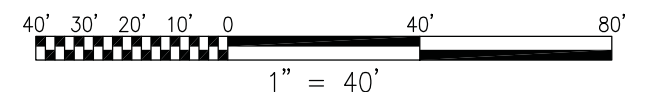
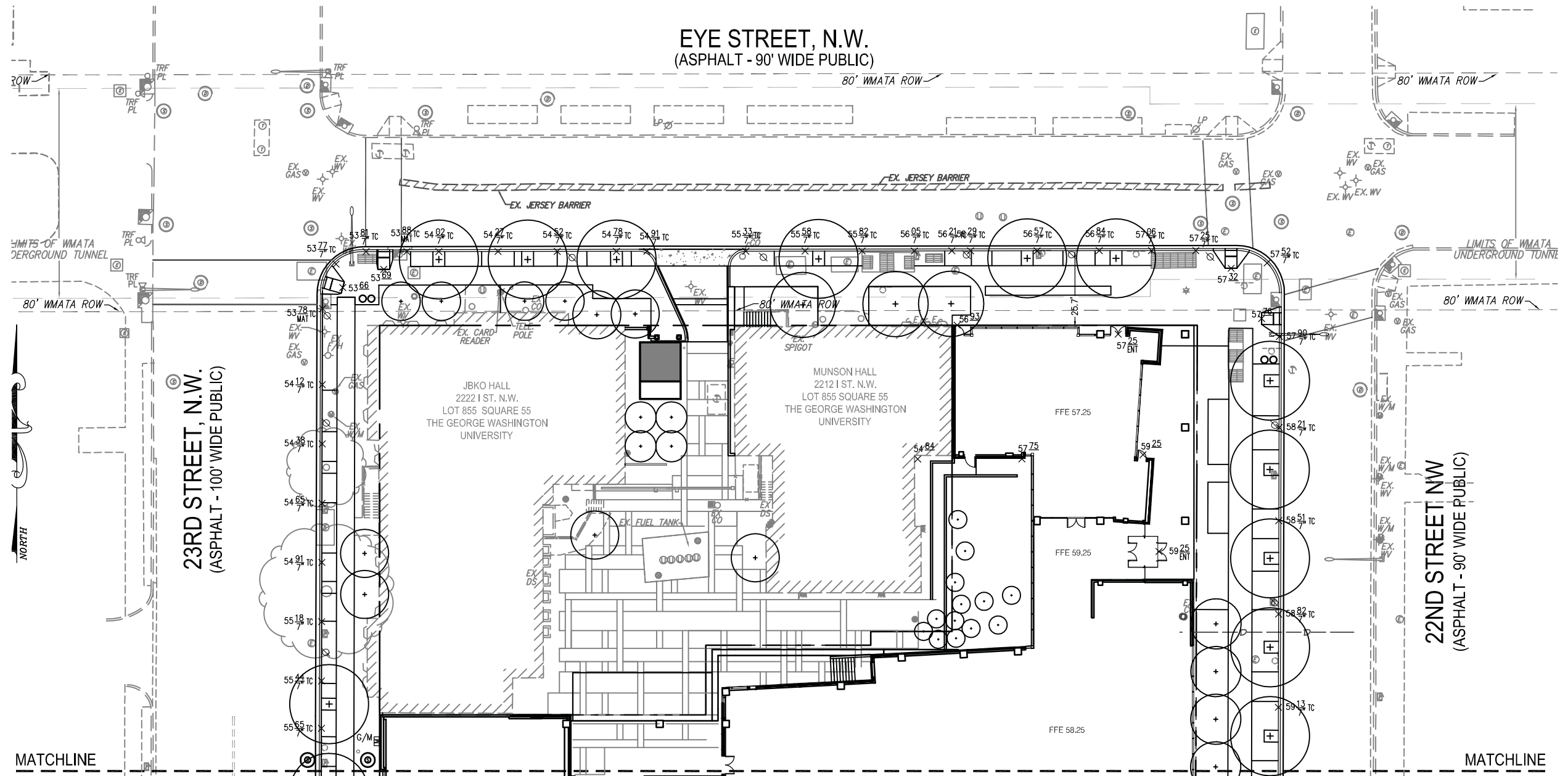
SECOND-STAGE
PUD APPLICATION

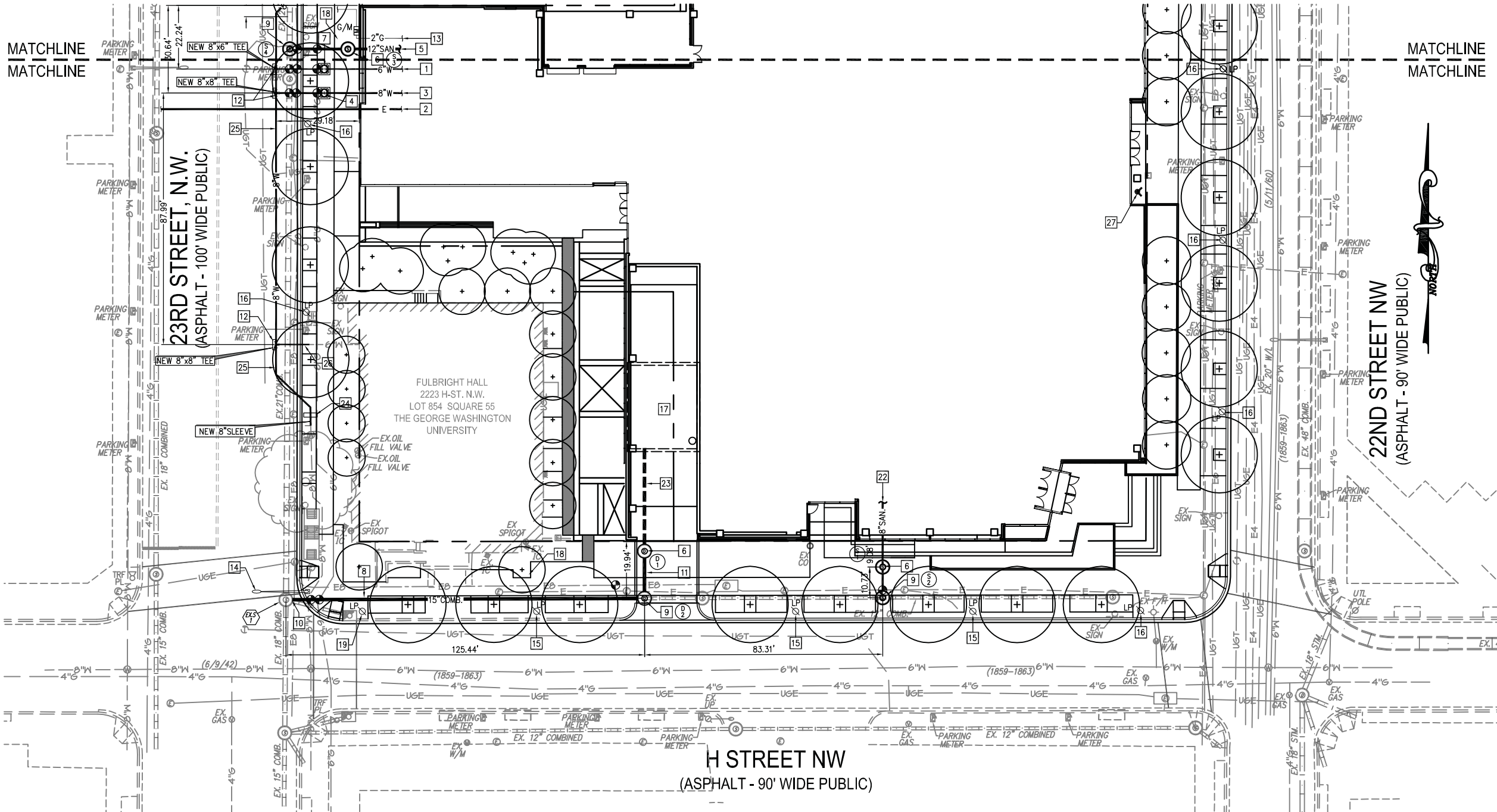
TITLE:

GRADING PLAN -
NORTH

NUMBER:

C-06



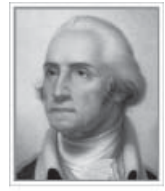
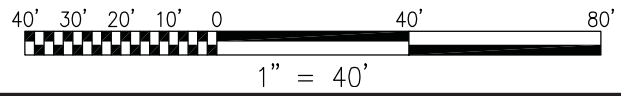


UTILITY KEYNOTES:

- 1 NEW 6" DIP CLASS 52 DOMESTIC WATER SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1015. WATER METER TO BE LOCATED INSIDE THE BUILDING.
- 2 NEW ELECTRIC DUCTBANK FROM ROSS HALL'S DISTRIBUTION SWITCHGEAR. SEE ELECTRICAL DRAWINGS FOR DETAILS.
- 3 NEW 8" DIP CLASS 52 FIRE SERVICE LATERAL. BACKFLOW PREVENTER VALVE TO MEET ASSE-1048.
- 4 NEW 8" WATER VALVE WITH 4.0" CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-20.01.
- 5 NEW 12" PVC SCH-40 SANITARY SEWER LATERAL.
- 6 NEW 4.0' DIAMETER CLEANOUT MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.01.
- 7 NEW 6" WATER VALVE WITH 4.0" CASING PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-20.01.
- 8 NEW 15" SDR-35 COMBINED SEWER LATERAL.
- 9 NEW 4.0' DIAMETER MANHOLE WITH DOGHOUSE BASE PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING S-20.11.
- 10 NEW CONNECTION TO EXISTING MANHOLE PER DC/WASA STANDARDS AND SPECIFICATIONS.
- 11 NEW 15" SDR-35 STORM SEWER LATERAL.
- 12 NEW CONCRETE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.01.

- 13 NEW 2" GAS SERVICE AND METER. SEE MEP DRAWING FOR DETAILS.
- 14 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 15 NEW TWIN-20 GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 16 NEW NO.16 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 17 NEW 23'-4" x 29'-2" CISTERN STRUCTURE. REFER TO MEP DRAWING FOR DETAILS.
- 18 NEW EMERGENCY SIGNAL POLE. REFER TO WELLS AND ASSOCIATES FOR DETAILS.
- 19 NEW NO.18 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 20 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS.
- 21 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS AND EXISTING PEDESTRIAN SIGNAL.
- 22 NEW 8" PVC SCH-40 SANITARY SEWER LATERAL.
- 23 NEW 12" PVC SCH-40 OVERFLOW PIPE. REFER TO PLUMBING DRAWING FOR DETAILS.
- 24 NEW IN-LINE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.02.

- 25 NEW 8" DIP CLASS 52 WATER MAIN.
- 26 EXISTING 6" DIP CLASS 52 FIRE SERVICE LATERAL TO BE EXTENDED TO NEW 8" WATER MAIN.
- 27 NEW FREE STANDING SIAMESE CONNECTION. REFER TO PLUMBING DRAWINGS FOR DETAILS.



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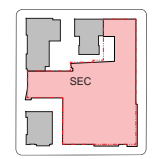
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KEY PLAN:

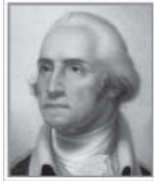


DATE:
MARCH 4, 2011

SECOND-STAGE
PUD APPLICATION

TITLE:
UTILITY PLAN - SOUTH

NUMBER:
C-07



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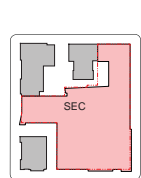
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KEY PLAN:



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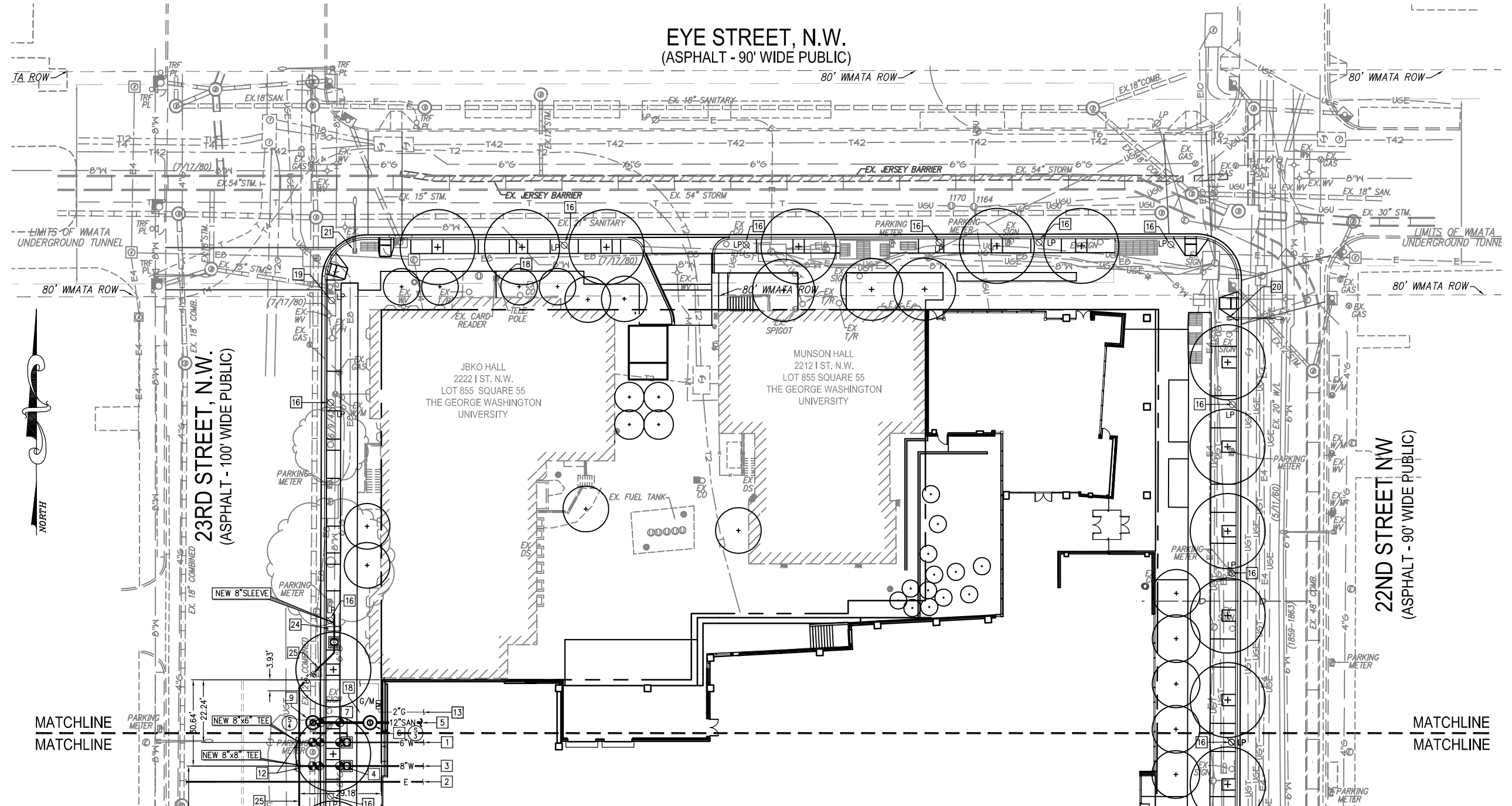
TITLE:

UTILITY PLAN -
NORTH

NUMBER:

C-08

EYE STREET, N.W.
(ASPHALT - 90' WIDE PUBLIC)

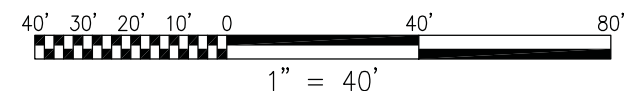


UTILITY KEYNOTES:

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- 12 NEW CONCRETE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.01.

- 13 NEW 2" GAS SERVICE AND METER. SEE MEP DRAWING FOR DETAILS.
- 14 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 15 NEW TWIN-20 GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 16 NEW NO.16 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS.
- 17 NEW 23'-4" x 29'-2" CISTERN STRUCTURE. REFER TO MEP DRAWING FOR DETAILS.
- 18 NEW EMERGENCY SIGNAL POLE. REFER TO WELLS AND ASSOCIATES FOR DETAILS.
- 19 NEW NO.18 SINGLE GLOBE STREETLIGHT PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING TRAFFIC SIGNAL, PROVIDE SEPARATE CONDUIT WITH THE NEW STREETLIGHT AND EXISTING TRAFFIC SIGNAL.
- 20 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS.
- 21 NEW PENDANT POLE WITH DECORATIVE ARM AND TEARDROP FIXTURE PER DC/DDOT STREETLIGHT STANDARDS AND SPECIFICATIONS. RE-INSTALL EXISTING SIGNS AND EXISTING PEDESTRIAN SIGNAL.
- 22 NEW 8" PVC SCH-40 SANITARY SEWER LATERAL.
- 23 NEW 12" PVC SCH-40 OVERFLOW PIPE. REFER TO PLUMBING DRAWING FOR DETAILS.

- 24 NEW IN-LINE THRUST BLOCK PER DC/WASA STANDARDS AND SPECIFICATIONS. REFER TO DC/WASA STANDARD DRAWING W-40.02.
- 25 NEW 8" DIP CLASS 52 WATER MAIN.
- 26 EXISTING 6" DIP CLASS 52 FIRE SERVICE LATERAL TO BE EXTENDED TO NEW 8" WATER MAIN.
- 27 NEW FREE STANDING SIAMESE CONNECTION. REFER TO PLUMBING DRAWINGS FOR DETAILS.



STORMWATER MANAGEMENT CALCULATIONS

TOTAL IMPERVIOUS AREA (Ia) = 56,882 sf or 1.30 ac

SEWER DATA:

Type of sewer: Combined Sewer
 Size of sewer: Existing 15"

(QUANTITY CONTROL REQUIREMENTS):

$Q = C * I * A$

where: Q = peak flow
 C = runoff coefficient
 I = intensity (in/hr)
 A = drainage area (Ia)

2-YEAR CONTROL (Qpre)

$Q_{pre} = (0.35 * 5.28 \text{ in./hr.} * 1.30 \text{ ac})$

$Q_{pre} = 2.40 \text{ cfs}$

15-YEAR CONTROL (Qpost)

$Q_{post} = (0.90 * 7.56 \text{ in./hr.} * 1.30 \text{ ac})$

$Q_{post} = 8.84 \text{ cfs}$

(SHORT-CUT ROUTING):

where: Tc = time of concentration (5 min)

$V_{scr} = 1.25 (Q_{post} - Q_{pre}) T_c$
 $= 1.25 [(8.84 - 2.40) (5 \text{ min} * 60 \text{ sec/min})]$

$V_{scr} = 2,415 \text{ cf}$ or 18,064.20 gallons

(DETERMINE WATER QUALITY VOLUME):

where: Vqv = water quality volume to be treated

R (runoff depth) = 0.5 inches (rooftops, sidewalks, pedestrian plaza areas)

Ia = 0.83 ac (impervious area)

$V_{qv} = \frac{R * I_a}{12}$
 $= \frac{0.5 \text{ in.} * 56,882 \text{ sf}}{12}$

$V_{qv} = 2,370.08 \text{ cf}$ or 17,728.20 gallons

NOTE: Per DDOE standards, whichever of the two volume computations is larger, use the larger one for both quantity and quality requirements.

(VOLUME OF CISTERN PROVIDED):

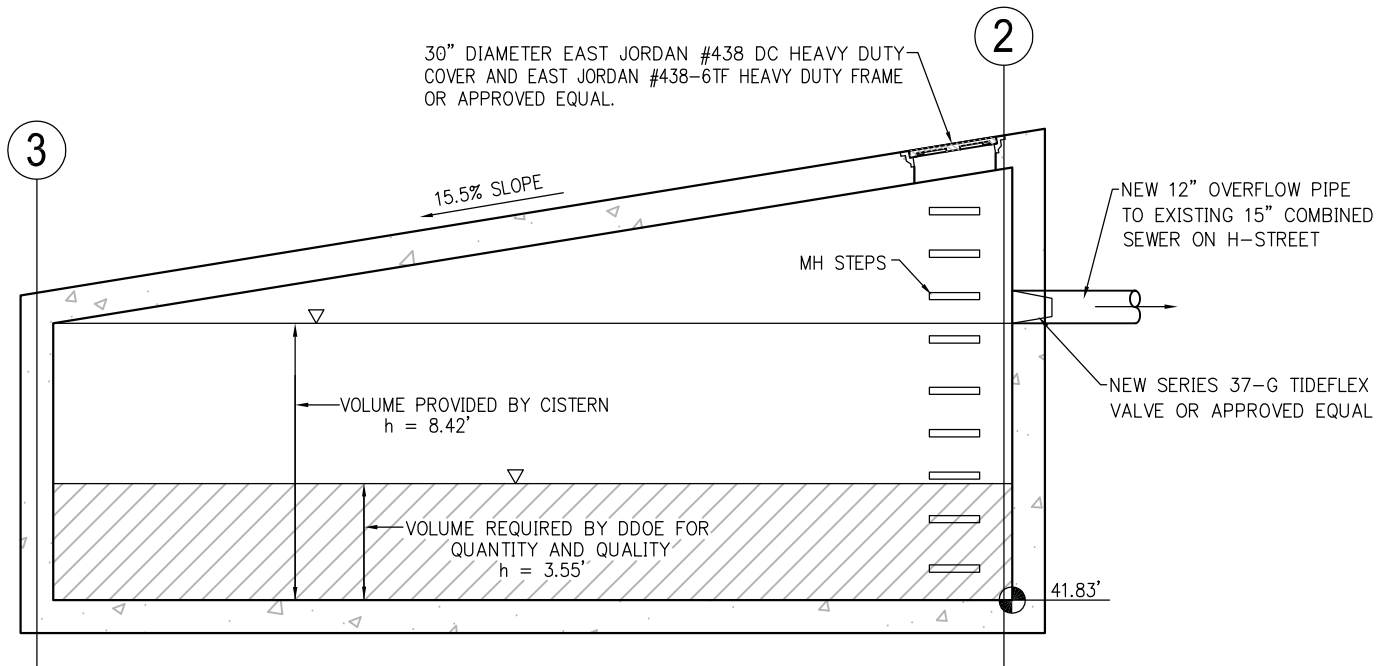
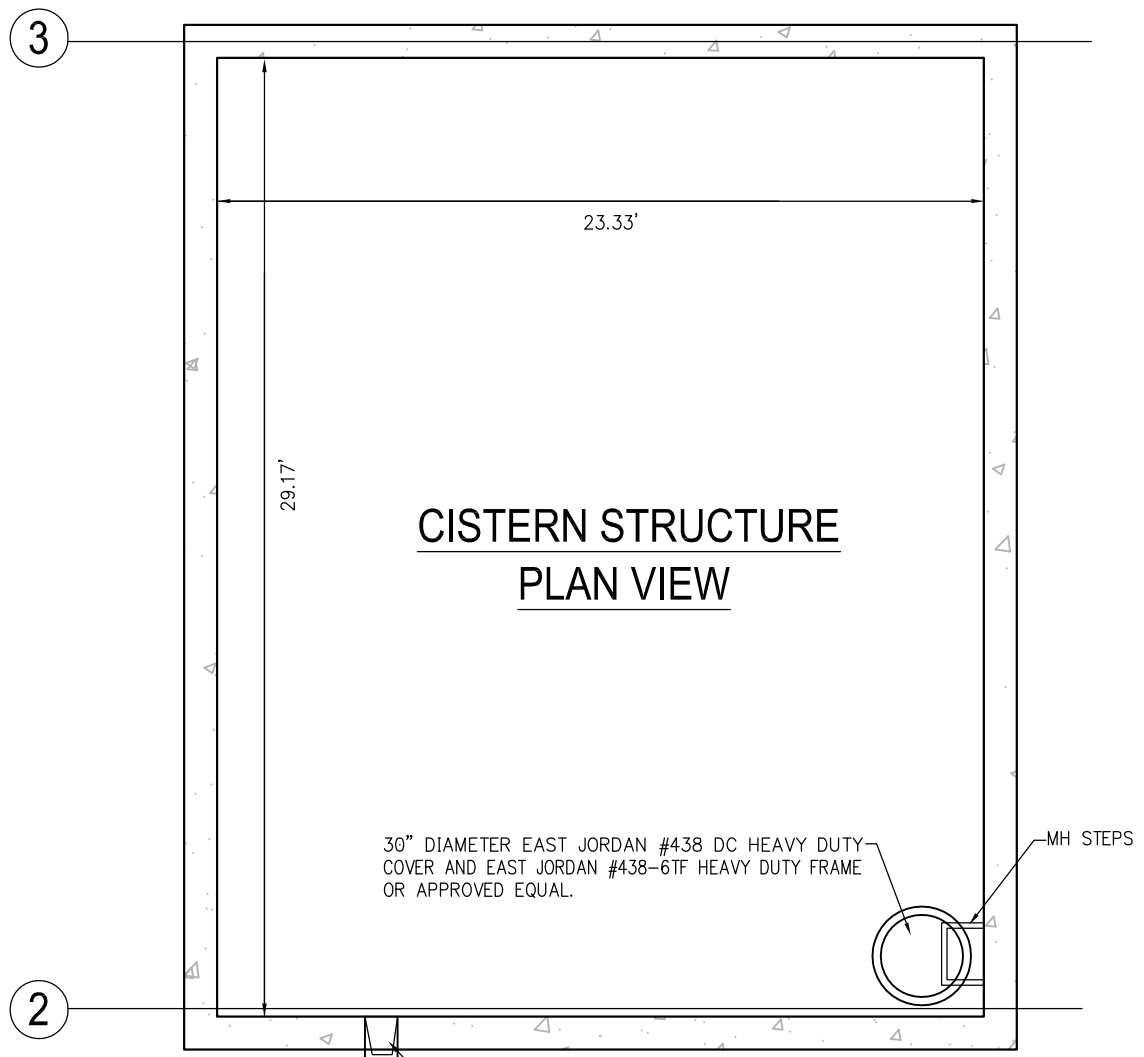
Vcistern = Length x Width x Height
 $= 29.17' * 23.33' * 8.42'$

Vcistern = 5,730.11 cf or 42,861.22 gallons

VOLUME PROVIDED >= VOLUME REQUIRED

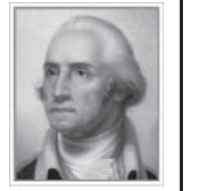
VOLUME PROVIDED: 5,730.11 cf >= VOLUME REQUIRED: 2,415 cf

VOLUME OF CISTERN IS GREATER THAN VOLUME REQUIRED THEREFORE THE STRUCTURE SATISFIED THE DDOE REQUIREMENTS.



NEW 12" OVERFLOW PIPE TO EXISTING 15" COMBINED SEWER ON H-STREET
 NEW SERIES 37-G TIDEFLEX VALVE OR APPROVED EQUAL

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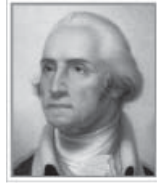
KEY PLAN: [Map showing SEC location]

DATE: MARCH 4, 2011

SECOND-STAGE PUD APPLICATION

TITLE: STORM WATER MANAGEMENT PLAN

NUMBER: C-09



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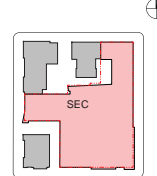
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KEY PLAN:



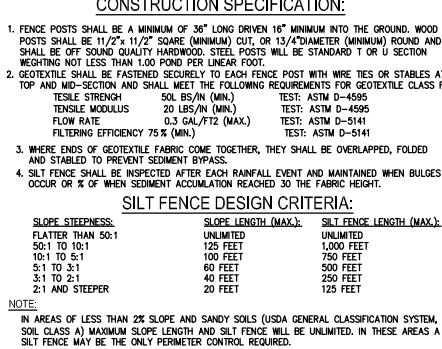
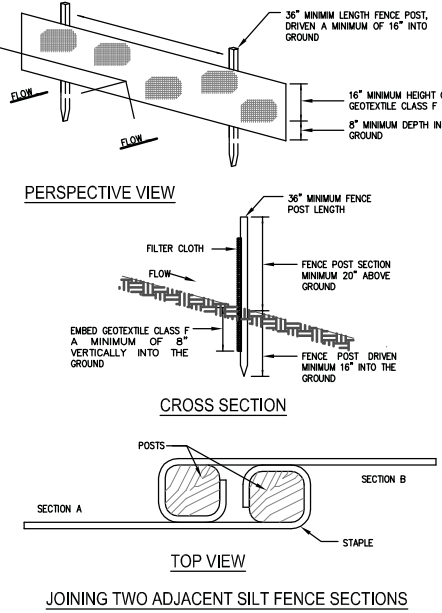
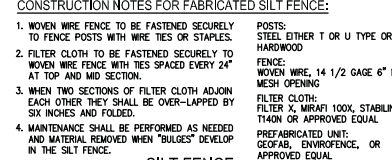
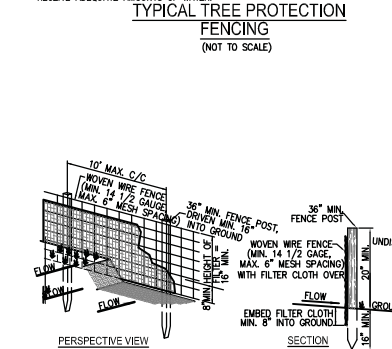
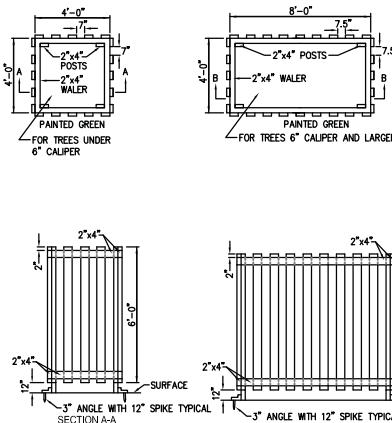
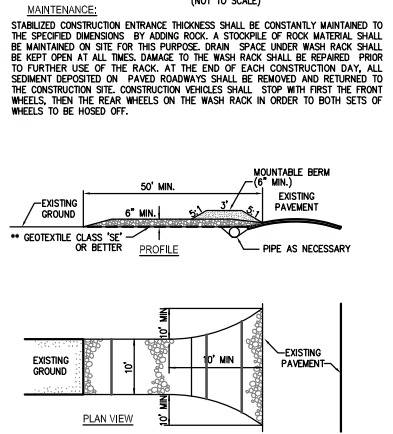
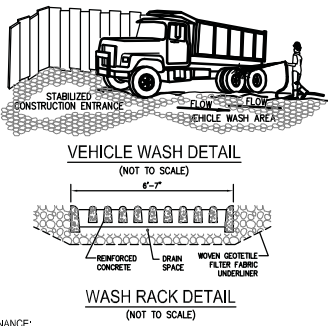
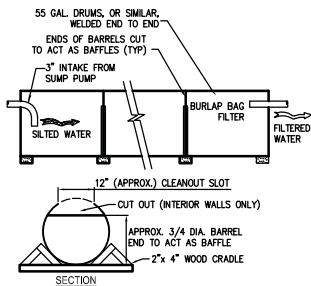
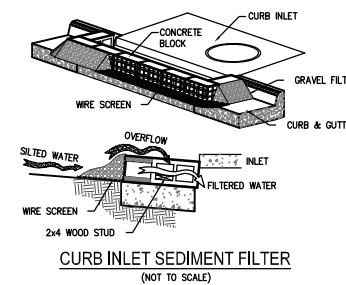
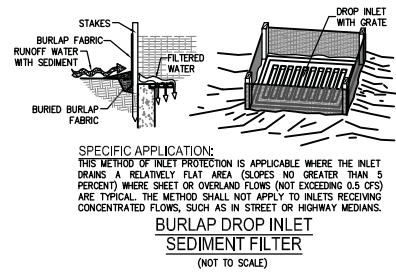
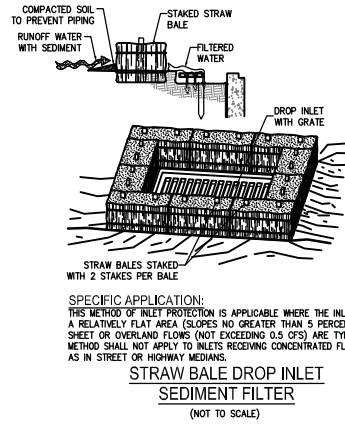
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SECOND-STAGE PUD APPLICATION

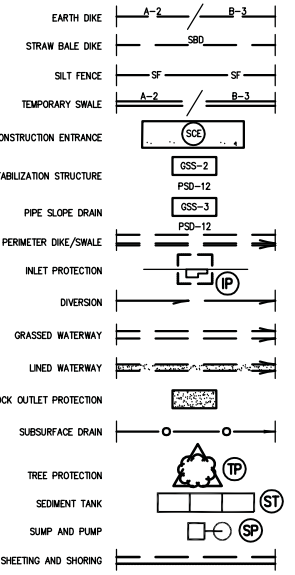
TITLE: SEDIMENTATION AND EROSION CONTROL DETAILS

NUMBER:

C-10



LIST OF STANDARD SYMBOLS



STANDARD EROSION AND SEDIMENT CONTROL MEASURES AND SEQUENCE:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.
2. PROVIDE TEMPORARY STONE CONSTRUCTION ENTRANCE WHERE SHOWN. PROVIDE WATER SOURCE AND HOSE TO CLEAN ALL EQUIPMENT LEAVING SITE.
3. INSTALL SILT FENCE AS SHOWN.
4. NO DISTURBED AREA WILL BE DENuded FOR MORE THAN 7 CALENDAR DAYS. INSTALL THE NECESSARY TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION MEASURES TO ACHIEVE ADEQUATE EROSION AND SEDIMENT CONTROL.
5. ALL CONSTRUCTION TO BE INSPECTED DAILY BY THE CONTRACTOR, AND ANY DAMAGED STATION OR EROSION CONTROL DEVICES OR MEASURES WILL BE REPAIRED AT THE CLOSE OF THE DAY.
6. ALL SILT FENCE TO BE MAINTAINED IN WORKING CONDITION.
7. STABILIZED CONSTRUCTION ENTRANCES TO BE PERIODICALLY SUPPLEMENTED WITH ADDITIONAL STONE AS NEEDED.
8. CONTROLS CAN BE REMOVED AFTER THEIR CONTRIBUTING BASINS HAVE BEEN PERMANENTLY STABILIZED, AND APPROVAL OF INSPECTOR IS OBTAINED.

SILTATION EROSION CONTROL NOTES:

1. ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR CONSTRUCTION AS PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED.
2. ALL DEBRIS IS TO BE REMOVED FROM THE SITE.
3. ALLEY AND / OR STREET SHALL BE SWEEP CLEAN AT ALL TIMES DURING EXCAVATION AND CONSTRUCTION.
4. ALL SEDIMENT AND EROSION CONTROL MEASURES TO BE INSPECTED DAILY BY THE CONTRACTOR. ANY DAMAGED DEVICE OR MEASURE WILL BE REPAIRED OR REPLACED BY THE CLOSE OF DAY OR AS DIRECTED BY THE ARCHITECT.
5. ALL VEHICLES LEAVING THE SITE SHALL EXIT THROUGH THE CONSTRUCTION ENTRANCE ONLY AND SHALL BE WASHED DOWN TO REMOVE MUD FROM TIRES BEFORE ENTERING THE STREET. CONSTRUCTION ENTRANCE TO BE MAINTAINED IN GOOD WORKING CONDITIONS.
6. ALL CATCH BASINS AND AREA DRAINS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION.
7. IF ANY CATCH BASIN OR DRAIN BECOMES CLOGGED AS A RESULT OF EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS IMMEDIATE CLEANING.
8. ALL DISTURBED AREAS WITHIN THE LIMIT OF DISTURBANCE BOUNDARY NOT SHOWN TO BE PAVED SHALL BE SEEDED OR SOODED AS PER DC SPECIFICATIONS WITHIN SEVEN DAYS OF DISTURBANCE.
9. WHEN SEDIMENT TRAP/SEDIMENT TANK HAS REACHED 67% CAPACITY, CLEAN OUT OF SAME IS REQUIRED.
10. ANY STOPPING, REGARDLESS OF LOCATION ON SITE SHALL BE STABILIZED WITHIN 14 DAYS AND COVERED WITH PLASTIC OR CANVAS, AFTER ITS ESTABLISHMENT AND FOR THE DURATION OF THE PROJECT.
11. AFTER RAZE OR DEMOS, THERE IS NEED FOR GROUND COVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING. SUCH AS SEED, SOIL, PAVING, BRICKBRACK OR MULCH, ETC.
12. AT THE COMPLETION OF CONSTRUCTION PROJECT AND AFTER THE D.C. EROSION AND SEDIMENT CONTROL INSPECTOR APPROVAL, ALL TEMPORARY SILTATION, SEDIMENTATION AND EROSION CONTROL MEASURES AND DEVICES SHALL BE REMOVED AND ALL DENuded AREAS SHALL BE PERMANENTLY STABILIZED.

